

REMARKS

Summary of the Office Action

Claims 1, 3, 8 and 10-13 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over *Lee* (USPN 6,410,414) in view of *Toyosawa et al.* (USPN 6,441,467).

Summary of the Response to the Office Action

Applicants amended claims 1 and 8 and added new claims 14 and 15. Accordingly, claims 1, 3 and 5-15 are presently pending.

All Claims Define Allowable Subject Matter

Claims 1, 3, 8 and 10-13 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over *Lee* (USPN 6,410,414), in view of *Toyosawa et al.* (USPN 6,441,467).

Applicants respectfully traverse the rejection for at least the following reasons.

Independent claims 1 and 8, as amended, recite “a metal interconnect layer ... serving as a bonding pad” wherein “part of the region of the surface of the metal interconnect layer is exposed from the planarized polyimide.” Page 2 of the Office Action suggests that the metal pattern 110 of *Lee* is the “metal interconnect layer,” as claimed, and that the polyimide layer 116 of *Lee* is the “planarized polyimide,” as claimed. Applicants respectfully disagree.

Applicants respectfully assert that the metal pattern 110 of *Lee* is not “a metal interconnect layer,” as claimed at least because it does not serve “as a bonding pad,” as required by independent claims 1 and 8, as amended. At best, the bonding pad 102 of *Lee* is the “metal interconnect layer,” as claimed, at least because independent claims 1 and 8 recite “a metal interconnect layer ... serving as a bonding pad.” However, Applicants respectfully assert that

the bonding pad 102 of *Lee* is not exposed from the polyimide layer 116 as required by independent claims 1 and 8. Accordingly, Applicants respectfully assert that independent claims 1 and 8, as amended, and hence dependent claims 3, 5-7, and 9-13 are allowable. Therefore, Applicants respectfully request that the rejections under 35 U.S.C. § 103(a) be withdrawn.

New Claims 14 and 15

Applicants add new claims 14 and 15. No new matter has been entered. (See at least paragraphs [0053], [0055], and [0056] of the Specification) Applicants respectfully assert that claims 14 and 15 are allowable at least for the matters recited therein.

In particular, page 3 of the Office Action admits that *Lee* fails to disclose the metal interconnect layer being made of gold and a projection area of the metal interconnect layer connected with a bonding wire being overlapped with said functional semiconductor device. Applicants respectfully assert that *Toyosawa et al.* fails to remedy the deficiencies of *Lee*.

Page 3 of the Office Action suggests that the gold bump 17 of *Toyosawa et al.* is the “metal interconnect layer,” as claimed. Applicants respectfully assert that *Toyosawa et al.* teaches away from the feature “wherein the planarized polyimide is removed only at the part of the region of the surface of the metal interconnect layer, thereby the metal interconnect layer includes a part of the surface exposed from the planarized polyimide and a part of the surface coated with the planarized polyimide,” (emphasis added) as required by claims 14 and 15, at least because the entire surface of the gold bump 17 is exposed.

Conclusion

In view of the foregoing, Applicants respectfully request reconsideration and the timely allowance of the pending claims. Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact Applicants' undersigned representative to expedite prosecution.

If there are any other fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-0310. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

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